

Article 3
Federal Operating Permit

This permit is based upon Federal Clean Air Act acid rain permitting requirements of Title IV, federal operating permit requirements of Title V; and Chapter 80, Article 3 and Chapter 140 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, 10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, 9 VAC 5-80-360 through 9 VAC 5-80-700, and 9 VAC 5-140-10 through 9 VAC 5-140-900 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Virginia Electric and Power Company
Facility Name:	Chesapeake Energy Center
Facility Location:	2701 Vepco Street Chesapeake, Virginia
Registration Number:	60163
Permit Number:	TRO-60163

NOVEMBER 25, 2002
Initial Permit Date

MAY 30, 2006
Modification Date

DECEMBER 31, 2007
Expiration Date

Harold J. Winer
Deputy Regional Director

MAY 30, 2006
Signature Date

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Sections I through IX)

Federally Enforceable Requirements - Title IV Acid Rain (Section X)

Federally Enforceable Requirements - NO_x Budget Trading Requirements (Section XI)

State Only Enforceable Requirements (Section XII)

The permit application submitted for this source including the attached NO_x compliance plan and NO_x Averaging Plan has been attached to this document.

The Phase II Acid Rain Permit (Effective Date October 16, 2002) has been attached to this document.

Table of Contents, 2 pages

Permit Conditions, 51 pages

Virginia Electric and Power Company - Chesapeake Energy Center
Title V Operating Permit Table of Contents

I. FACILITY INFORMATION.....	5
II. EMISSION UNITS	7
III. FUEL BURNING EQUIPMENT REQUIREMENTS – (BOILERS & COMBUSTION TURBINES).....	11
A. LIMITATIONS	11
B. MONITORING	15
C. RECORDKEEPING	18
D. TESTING	20
E. REPORTING	21
IV. PROCESS EQUIPMENT REQUIREMENTS – (COAL AND FLY ASH HANDLING)	22
A. LIMITATIONS	22
B. MONITORING	23
C. RECORDKEEPING	24
D. TESTING	25
V. FACILITY WIDE CONDITIONS	26
A. LIMITATIONS	26
VI. SYN FUEL PLANT	29
A. LIMITATIONS	29
B. MONITORING	33
C. RECORDKEEPING	33
VII. INSIGNIFICANT EMISSION UNITS.....	34
VIII. PERMIT SHIELD & INAPPLICABLE REQUIREMENTS.....	37
IX. GENERAL CONDITIONS.....	38
A. FEDERAL ENFORCEABILITY	38
B. PERMIT EXPIRATION	38
C. RECORDKEEPING AND REPORTING	39
D. ANNUAL COMPLIANCE CERTIFICATION	40
E. PERMIT DEVIATION REPORTING	41
F. FAILURE/MALFUNCTION REPORTING	41
G. SEVERABILITY	41
H. DUTY TO COMPLY	42
I. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE.....	42
J. PERMIT MODIFICATION	42
K. PROPERTY RIGHTS	42
L. DUTY TO SUBMIT INFORMATION	42
M. DUTY TO PAY PERMIT FEES	43
N. FUGITIVE DUST EMISSION STANDARDS	43
O. STARTUP, SHUTDOWN, AND MALFUNCTION	44
P. ALTERNATIVE OPERATING SCENARIOS	44
Q. INSPECTION AND ENTRY REQUIREMENTS	44
R. REOPENING FOR CAUSE	45
S. PERMIT AVAILABILITY	45
T. TRANSFER OF PERMITS	45
U. MALFUNCTION AS AN AFFIRMATIVE DEFENSE	46
V. PERMIT REVOCATION OR TERMINATION FOR CAUSE	47

W. DUTY TO SUPPLEMENT OR CORRECT APPLICATION	47
X. STRATOSPHERIC OZONE PROTECTION.....	47
Y. ASBESTOS REQUIREMENTS.....	47
Z. ACCIDENTAL RELEASE PREVENTION	48
AA. CHANGES TO PERMITS FOR EMISSIONS TRADING.....	48
BB. EMISSIONS TRADING.....	48
X. TITLE IV (PHASE II ACID RAIN) PERMIT ALLOWANCES AND REQUIREMENTS.....	48
XI. NO_x BUDGET TRADING PROGRAM REQUIREMENTS	49
A. NO _x BUDGET PERMIT GENERAL CONDITIONS	49
B. STANDARD REQUIREMENTS	49
C. RECORDKEEPING AND REPORTING REQUIREMENTS.....	52
D. TESTING FOR CEM CERTIFICATION	53
E. LIABILITY	53
F. EFFECT ON OTHER AUTHORITIES.....	54
XII. STATE-ONLY ENFORCEABLE REQUIREMENTS.....	55

I. Facility Information

Permittee Information

Virginia Electric and Power Company
5000 Dominion Boulevard
Glen Allen, Virginia 23060

Responsible Official

O. Preston Sloane
Station Director, Chesapeake Energy Center

Acid Rain Designated Representative (if different than above)

J. David Rives
Vice President - Fossil & Hydro
USEPA ATS-AAR ID Number 602099

NO_x Budget Trading Authorized Account Representative

J. David Rives
Vice President - Fossil & Hydro
USEPA AAR ID Number 602099

Facility ID

Chesapeake Energy Center
2701 Vepco Street
Chesapeake, Virginia 23320

Facility Contact Person

Pamela F. Faggert
Vice President & Chief Environmental Officer
(804) 273-3467

AFS Identification Number: 51-550-00026

ORIS Code: 3803

NATS Facility Identification Number: 003803000001

Facility Description (provided for informational purposes only): NAICS Code 221112 – Electrical Power Generation - Fossil. The facility combusts fossil fuels for the generation of electrical power. The facility produces electrical power using four (4) coal-fired steam generators and eight (8) combustion turbines. The four steam generating boilers are also capable of firing No. 2 fuel oil as a primary fuel. Additionally, Units 1 and 2 are capable of firing natural gas while Units 3 and 4 are capable of firing No. 6 fuel oil. Units 3 and 4 are also capable of evaporating boiler solvent cleaning solution. Units 1 and 2 have a close-coupled overfire air system to control NO_x emissions. This system will be replaced by a

rotating overfire air (ROFA) system. Units 3 and 4 have selective catalytic reduction (SCR) systems and Unit 3 also has low NO_x burners. The NO_x control equipment on Units 1 through 4 is voluntary and is not required by permit or otherwise. These voluntary control devices may be replaced, or additional voluntary controls may be installed in the future. Listing the equipment in this permit does not trigger any state or federal requirements.

The eight combustion turbines are each capable of burning either natural gas or distillate fuel oil. In addition, the facility consists of coal and fly ash handling systems. This facility is also an acid rain facility subject to Title IV of the Clean Air Act.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description*	PCD ID	Pollutant Controlled*	Applicable Permit Date*
Fuel Burning Equipment							
ES-1	EP-1	Unit 1 - Combustion Engineering tangential-fired boiler constructed in 1953 (using close-coupled Overfire air system or ROFA system added on a voluntary basis after the unit was permitted). Fires coal as primary fuel and distillate fuel oil (No. 1 or 2) or natural gas as secondary fuel.	1300 x 10 ⁶ BTU/hour (nominal)	Environmental Elements cold-side electrostatic precipitator	CD-1	PM	10/20/98
ES-2	EP-2	Unit 2 - Combustion Engineering tangential-fired boiler constructed in 1954 (using close-coupled Overfire air system or ROFA system added on a voluntary basis after the unit was permitted). Fires coal as primary fuel and distillate fuel oil (No. 1 or 2) or natural gas as secondary fuel.	1300 x 10 ⁶ BTU/hour (nominal)	Environmental Elements cold-side electrostatic precipitator	CD-2	PM	10/20/98

ES-3	EP-3	Unit 3 - Babcock & Wilcox front wall-fired boiler constructed in 1959 using low NO _x burners (voluntary). Fires coal or heavy oil (No. 6) as primary fuel and distillate fuel oil (No. 1 or 2) as secondary fuel. Evaporates boiler solvent cleaning solution.	1663 x 10 ⁶ BTU/hr (nominal)	(1) American Air Filter cold-side electrostatic precipitator; (2) SCR – voluntary addition after the unit was permitted.	(1) CD-3A (2) CD-3B	(1) PM (2) NO _x	(1) 4/25/95; 4/01/02 (2) N/A
ES-4	EP-4	Unit 4 - Combustion Engineering tangential-fired boiler constructed in 1962. Fires coal or heavy oil (No. 6) as primary fuel and distillate fuel oil (No. 1 or 2) as secondary fuel. Evaporates boiler solvent cleaning solution.	2346 x 10 ⁶ BTU/hr (nominal)	(1) Lodge-Cottrell cold-side electrostatic precipitator; (2) SCR – voluntary addition after the unit was permitted.	(1) CD-4 (2) CD-4A	(1) PM (2) NO _x	(1) 4/25/95; 4/01/02 (2) N/A
ES-5	EP-5	Unit 1 - Pratt & Whitney natural gas-fired combustion turbine constructed in 1967. Fires distillate fuel oil (No. 1 or 2) or natural gas.	281 x 10 ⁶ BTU/hr (nominal)	-	-	-	-
ES-6	EP-6	Unit 2 - Westinghouse 191 combustion turbine constructed in 1969. Fires distillate fuel oil (No. 1 or 2) or natural gas.	263 x 10 ⁶ BTU/hr (nominal)	-	-	-	-
ES-7	EP-7	Unit 4 - Westinghouse 191 combustion turbine constructed in 1969. Fires distillate fuel oil (No. 1 or 2) or natural gas.	263 x 10 ⁶ BTU/hr (nominal)	-	-	-	-

ES-8	EP-8	Unit 6 - Westinghouse 191 combustion turbine constructed in 1969. Fires distillate fuel oil (No. 1 or 2) or natural gas.	263 x 10 ⁶ BTU/hr (nominal)	-	-	-	-
ES-9	EP-9	Unit 7 - Westinghouse 251 combustion turbine constructed in 1969. Fires distillate fuel oil (No. 1 or 2) or natural gas.	369 x 10 ⁶ BTU/hr (nominal)	-	-	-	-
ES-10	EP-10	Unit 8 - Westinghouse 251 combustion turbine constructed in 1969. Fires distillate fuel oil (No. 1 or 2) or natural gas.	369 x 10 ⁶ BTU/hr (nominal)	-	-	-	-
ES-11	EP-11	Unit 9 - Westinghouse 251 combustion turbine constructed in 1970. Fires distillate fuel oil (No. 1 or 2) or natural gas.	369 x 10 ⁶ BTU/hr (nominal)	-	-	-	-
ES-12	EP-12	Unit 10 - Westinghouse 251 combustion turbine constructed in 1970. Fires distillate fuel oil (No. 1 or 2) or natural gas.	369 x 10 ⁶ BTU/hr (nominal)	-	-	-	-
Coal Handling							
ES-13a	EP-13a	Coal car unloading	800 tons of coal per hour	-	-	-	-
ES-13b	EP-13b	Coal crusher	800 tons of coal per hour	-	-	-	-
ES-13c	EP-13c	Coal conveying system	800 tons of coal per hour	Covered conveyors	-	-	-
ES-13d	N/A	Coal pile stacker and handling consisting of bulldozer operations and wind erosion	800 tons of coal per hour	Wet suppression for stacker	WS-13d	PM	6/18/84

Fly Ash Handling							
ES-14a, b, c, d, e, & f	EP-14a, b, c, d, e, & f	Six (6) vacuum pumps for fly ash storage silos A & B	59 tons of fly ash per hour, each silo	Four (4) United Conveyor pulse jet-cleaned fabric filters per silo	CD-14a1-4& CD-14b1-4	PM	6/18/84
ES-14g & h	EP-14g & h	Silos A & B truck loadout areas	600 tons of fly ash per hour, each loadout area	Semi-enclosed loading area, water added as fly ash is loaded, and water spray bars at entrance and exit of each loading area.	WS-14g & h	PM	6/18/84
ES-14i	EP-14i	Fly ash truck dumping at outdoor storage area	480 tons of fly ash per hour	Water added as ash is loaded at each silo truck loading area and covers on trucks.	WS-14g, h, & TC-14i	PM	6/18/84

*The Size/Rated capacity, pollution control descriptions, and applicable permit dates are provided for informational purposes only and are not applicable requirements.

III. Fuel Burning Equipment Requirements – (Boilers & Combustion Turbines)

A. Limitations

Boilers

1. Particulate emissions from the boilers (Units 1, 2, 3, and 4) shall be controlled by the use of electrostatic precipitators. Each electrostatic precipitator shall be provided with adequate access for inspection.
(9 VAC 5-80-110, Condition 3 of 4/1/02 permit, Condition 3 of 10/20/98 PSD permit, and Condition 3 of 4/25/95 permit)
2. The approved fuels for Units 1 and 2 (Unit Ref. Nos. ES-1 and ES-2) are coal, natural gas, and distillate oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396-78 “Standard Specification for Fuel Oils.” A change in the fuels may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 5 of 10/20/98 PSD permit)
3. The approved fuels for Units 3 and 4 (Unit Ref. Nos. ES-3 and ES-4) are coal, heavy oil, and distillate oil. Boiler solvent cleaning solution may be evaporated in Units 3 and 4. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396-78 “Standard Specification for Fuel Oils.” Heavy oil is defined as No. 6 under the American Society for Testing and Materials, ASTM D396-78 “Standard Specification for Fuel Oils.” A change in the fuels may require a permit to modify and operate.
(9 VAC 5-80-110)
4. The rate of consumption of boiler solvent cleaning solution in Unit 3 or Unit 4 shall not exceed 120 gallons per minute.
(9 VAC 5-80-110 and Condition 4 of 4/25/95 permit)
5. The consumption of boiler solvent cleaning solution shall only be conducted in one unit at a time.
(9 VAC 5-80-110 and Condition 11 of 4/25/95 permit)

6. Units 3 and 4 (combined) shall consume no more than 72,000 gallons of undiluted boiler solvent cleaning solution per year, calculated monthly as the sum of each consecutive 12-month period. The boiler solvent cleaning solution shall be diluted with an amount of water at least double the amount of boiler solvent cleaning solution prior to consumption in the boilers.
(9 VAC 5-80-110 and Condition 5 of 4/25/95 permit)

7. The approved boiler cleaning solvents for consumption in Units 3 and 4 and their allowable concentrations are as follows:
- a. Tetra Ammonium EDTA (590.8 lbs Tetra Ammonium EDTA per 1000 gallons of water)
 - b. Ammonium Hydroxide (148.7 lbs Ammonium Hydroxide per 1000 gallons of water)
 - c. Di-Ammonium EDTA (605.9 lbs Di-Ammonium EDTA per 1000 gallons of water)

All combinations of these solvents in the above-specified concentrations are acceptable. However, a change in the concentration of these solutions or the use of additional solutions may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 6 of 4/25/95 permit)

8. The metal contaminant level per 1000 gallons of boiler solvent cleaning solution shall not exceed the following:
- 7.59 lbs Ni
 - 4.40 lbs Zn
 - 2.95 lbs Ca
 - 0.60 lbs Mn

The boiler solvent cleaning solution shall be analyzed for the above metals prior to consumption in the boilers. Test results shall be reported in pounds of each metal per 1000 gallons of boiler solvent cleaning solution.
(9 VAC 5-80-110 and Conditions 7 and 8 of 4/25/95 permit)

9. Visible emissions from each of the boiler stacks of Units 1 and 2 shall not exceed twenty (20%) percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty (30%) percent opacity. The opacity standards apply at all times except during periods of startup, shutdown or malfunction.
(9 VAC 5-50-80, 9 VAC 5-50-20 and 9 VAC 5-80-110)
10. Visible emissions from each of the boiler stacks of Units 3 and 4 while burning coal, No. 2 oil, No. 6 oil, or any combination thereof only shall not exceed twenty (20%) percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed sixty (60%) percent opacity.
(9 VAC 5-40-80 and 9 VAC 5-80-110)

11. Visible emissions from the combined burning of coal, No. 2 oil, No. 6 oil, or any combination thereof with boiler solvent cleaning solution in Units 3 and 4 shall not exceed twenty (20%) percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty (30%) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-110, 9 VAC 5-50-80, and Condition 12 of 4/25/95 permit)
12. Visible emissions from the combustion turbines (ES-5, 6, 7, 8, 9, 10, 11, and 12) shall not exceed twenty (20%) percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed sixty (60%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-110 and 9 VAC 5-40-80)
13. Emissions from the operation of Units 1 and 2 each shall not exceed the limits specified below:

Particulate Matter (PM)	0.03 lbs/10 ⁶ Btu	33.9 lbs/hr	148.4 tons/yr
Sulfur Dioxide (SO ₂)	1.52 lbs/10 ⁶ Btu	1,753.8 lbs/hr	7,674.7 tons/yr
Nitrogen Oxides (as NO ₂)		678.0 lbs/hr	2,967.0 tons/yr
Carbon Monoxide (CO)		27.2 lbs/hr	118.7 tons/yr
Volatile Organic Compounds (VOC)		4.6 lbs/hr	19.8 tons/yr

(9 VAC 5-80-110 and Conditions 11 and 12 of 10/20/98 PSD permit)
14. The permittee must demonstrate that the particulate emission limits in Condition 13 of this permit are met over the entire range of coal ash content burned in Units 1 and 2. Records of such demonstration shall be kept on-site for inspection by DEQ for the most recent 5-year period.
(9 VAC 5-80-110 and Condition 10 of 10/20/98 PSD permit)

15. Emissions from the consumption of the boiler solvent cleaning solution in Units 3 and 4 (combined) shall not exceed the limits specified below:

Nitrogen Oxides 2,399.0 lbs/hr 36.0 tons/yr
(as NO₂)

(9 VAC 5-80-110 and Condition 10 of 4/25/95 permit)

16. Units 1, 2, 3, and 4 are subject to the provisions of 9 VAC 5 Chapter 80, Article 3 - Acid Rain Operating Permits. The permittee shall comply with all provisions of the 10/16/02 Phase II Acid Rain Permit (Attachment 1) in accordance with 40 CFR 72.1 through 76.16.

(9 VAC 5-80-110, 9 VAC 5 Chapter 80 - Article 3, and 10/16/02 Phase II Acid Rain Operating Permit)

Combustion Turbines

17. The approved fuels for the combustion turbines ES-5, 6, 7, 8, 9, 10, 11, and 12 are distillate oil and natural gas. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396-78 "Standard Specification for Fuel Oils." A change in the fuels may require a permit to modify and operate.

(9 VAC 5-80-110)

Station-Wide

18. PM emissions from Units 3 and 4 and the combustion turbines (combined) shall not exceed 0.1116 lbs/10⁶ Btu.

(Condition 5 of 4/1/02 permit, 9 VAC 5-80-110, and 9 VAC 5-40-900 and 910)

19. Sulfur dioxide emissions from Units 3 and 4 and the combustion turbines (combined) shall not exceed 2.64 lbs/10⁶ Btu of total heat input capacity, expressed in lbs/hr.

(9 VAC 5-80-110 and 9 VAC 5-40-930)

20. The total nitrogen oxide (NO_x) emission from Virginia Power's Chesapeake Energy Center and Yorktown Power Station combined shall not exceed 5,500 tons from June 1 to August 31 (inclusive) per calendar year, started in the year 2000.

(9 VAC 5-80-110 and Condition 3 of 9/3/96 Ozone Season permit)

21. The total nitrogen oxide (NO_x) emission from Virginia Power's Chesapeake Energy Center and Yorktown Power Station combined shall not exceed 5,000 tons from June 1 to August 31 (inclusive) per calendar year, starting in the year 2008.

(9 VAC 5-80-110 and Condition 4 of 9/3/96 Ozone Season permit)

B. Monitoring

22. A condition assessment shall be conducted on the electrostatic precipitators annually by the permittee to insure the equipment is in proper operating condition.
(9 VAC 5-80-110)
23. Continuous opacity monitors (COMs) shall be installed to measure and record the opacity of emissions from the stacks of Units 1, 2, 3 and 4. The monitors shall be maintained and calibrated in accordance with 9 VAC 5-40-41 of State Regulations.
(9 VAC 5-80-110, 9 VAC 5-40-40, and Condition 7 of 10/20/98 PSD permit)
24. The permittee shall perform visible emissions observations (VEOs) on the exhaust stack of each combustion turbine according to the following schedule:
 - a. At least one VEO shall be conducted on each unit that operates for a cumulative total of 20 hours or more during the calendar year.
 - b. At least one VEO shall be performed during each 200 hours of unit operation during the calendar year.
 - c. At least one VEO shall be performed during any unit operability verification testing conducted during the calendar year.

Each VEO shall be performed for a sufficient period of time to identify the presence of visible emissions. If visible emissions are observed, a Method 9-certified observer shall conduct a VEO. If visible emissions do not appear to exceed ten percent (10%) opacity, no action shall be required. However, if the observed visible emissions appear to exceed ten percent opacity, a visible emission evaluation (VEE) shall be conducted using 40 CFR Part 60, Appendix A, Method 9, for a period of not less than 6 minutes. If the average opacity exceeds 20%, modifications and/or repairs shall be performed to correct the problem and the corrective measures shall be recorded. If such corrective action fails to remedy the opacity problem, a VEE in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be performed for a period of at least 18 minutes to determine compliance with the opacity limits specified in Condition III.A.12 of this permit. The VEE observer shall be Method 9-certified.

(9 VAC 5-80-110 K)

25. Continuous emission monitors shall be used to measure and record the emissions of SO₂ and NO_x emitted from the stacks of Units 1 and 2 and SO₂ emitted from the stacks of Units 3 and 4. The continuous emission monitors shall be maintained, located, calibrated, and quality assured/controlled according to approved procedures in accordance with the provisions of 40 CFR Part 75.
(9 VAC 5-80-110 and Condition 8 of 10/20/98 PSD permit)
26. Compliance with the SO₂ emission limits for Units 1, 2, 3, and 4 set forth in Conditions 13 and 19 of this permit and with the NO_x emission limits for Units 1 and 2 set forth in Condition 13 of this permit shall be determined on a 30 boiler operating day rolling average. Compliance with these emission limits shall be determined on a 30 boiler operating day average for a minimum of 95 percent of the 30 boiler operating day rolling averages in any one quarter. A boiler operating day is as defined in 40 CFR 60.41a. The permittee shall submit quarterly excess emission reports for SO₂ and NO_x to the Director, Tidewater Regional Office within 30 days after the end of each calendar quarter. The content and format of the quarterly reports shall be arranged with the Director, Tidewater Regional Office.
(9 VAC 5-80-110 and Condition 9 of 10/20/98 PSD permit)
27. The permittee shall determine the actual NO_x emissions released from the Chesapeake Energy Center from June 1 to August 31 of each calendar year. Emissions from units equipped with continuous emission monitors shall be determined by the use of emission rates in lbs/10⁶ Btu collected in accordance with the provisions of 40 CFR 60, and the total heat input during the period for each unit (from fuel combustion and fuel analysis data). Emissions from units not equipped with continuous emission monitors shall be determined by the use of appropriate factors from EPA Publication AP-42. The results and any supporting data the Department may request shall be submitted to the Director, Tidewater Regional Office by October 15 of each calendar year.
(9 VAC 5-80-110 and Condition 3 of 9/3/96 Ozone Season permit)
28. The permittee shall review the recorded opacity data from the opacity monitor serving Units 3 and 4 daily. If the data indicate opacity approaching the applicable standard, the permittee shall check the boiler operating parameters to determine if parameters are within normal range. If the boilers are not operating within normal parameters, adjustments shall be made to return the unit(s) to proper operation. Opacity data shall be reviewed again to confirm proper operations. The recorded data shall be kept on-site for a minimum of five years.
(9 VAC 5-80-110 and 9 VAC 5-40-940)
29. The permittee shall determine, using engineering calculations or monitoring, NO_x emissions resulting from the consumption of boiler solvent cleaning solution in Units 3 and 4. Emissions shall be determined for the period of each event and totaled monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110)

30. The permittee shall calculate emissions of PM in lbs/mmBtu, lbs/hour, and tons per year and emissions of CO and VOC in lbs/hour and tons per year from the stacks of Units 1 and 2. The permittee shall calculate such emissions in lbs/mmBtu and lbs/hour weekly utilizing hourly boiler heat input data or hourly fuel throughput, control equipment efficiency, and appropriate F-factors or AP-42 emission factors. The permittee shall calculate annual emissions in tons/year monthly as the sum of each consecutive 12-month period utilizing monthly boiler heat input data or monthly fuel throughput, control equipment efficiency, and appropriate F-factors or AP-42 emission factors. In lieu of hourly or monthly calculations, the permittee may elect to make a one-time demonstration of the relationship between maximum hourly or monthly heat input or fuel throughput and maximum hourly and annual emissions using appropriate F-factors or AP-42 emission factors. Such a one-time demonstration shall be maintained on-site for the life of the units and shall demonstrate compliance with the emission limitations set forth in Condition 13 of this permit.

(9 VAC 5-80-110)

31. The permittee shall use monthly recorded CEMs data to calculate annual NO_x and SO₂ emissions from Units 1 and 2 monthly as the sum of each consecutive 12-month period. Calculations shall be maintained on-site for the most recent 5-year period and shall demonstrate compliance with the emission limitations set forth in Condition 13 of this permit.

(9 VAC 5-80-110)

32. The permittee shall calculate emissions of PM in lbs/mmBtu from Units 3 and 4 and the combustion turbines (combined). The permittee shall calculate emissions of SO₂ in lbs/mmBtu from the combustion turbines and use recorded CEMs data for SO₂ emissions in lbs/mmBtu from Units 3 and 4 to demonstrate compliance with the combined SO₂ limitations for the combustion turbines and Units 3 and 4 as specified in Condition 19. The permittee shall calculate such emissions weekly utilizing hourly heat input data or hourly fuel throughput, control equipment efficiency, and appropriate F-factors or AP-42 emission factors or CEMs data where appropriate. In lieu of an hourly calculation, the permittee may elect to make a one-time demonstration of the relationship between maximum hourly heat input or fuel throughput and maximum hourly emissions using appropriate F-factors or AP-42 emission factors. Such a one-time demonstration shall be maintained on-site for the life of the units and shall demonstrate compliance with the emission limitations set forth in Conditions 18 and 19 of this permit.

(9 VAC 5-80-110)

33. When in use, the ESP Energy Management System governing power to the electrostatic precipitator fields shall be operated in such a manner so as to ensure compliance with the PM limitations in Conditions 13 and 18 of this permit. The permittee shall record power curve data for the Energy Management System or other suitable data for the Units 1, 2, 3, and 4 ESPs when the Energy Management System is in operation.

(9 VAC 5-80-110 and Condition 4 of 4/1/02 permit)

C. Recordkeeping

34. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:
- a. A statement that the oil complies with the American Society for Testing and Materials specifications for fuel oil numbers 1 and 2, and
 - b. The sulfur content of the oil.

(9 VAC 5-80-110)

35. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
- a. Records of calculated or measured ozone season (June 1 to August 31 inclusive) NO_x emissions in tons.
 - b. The annual throughput of coal calculated monthly as the sum of each consecutive 12-month period.
 - c. All fuel supplier certifications.
 - d. The weighted annual average ash and sulfur content of coal burned, calculated as the sum of each consecutive 12-month period.
 - e. Annual emissions from Units 1 and 2 in tons per year of pollutants listed in Condition 13 of this permit. The permittee shall calculate these emissions monthly as the sum of each consecutive 12-month period.
 - f. The rate of consumption of boiler solvent cleaning solution in gallons per minute.
 - g. The amount of boiler solvent cleaning solution in gallons per year calculated monthly as the sum of each consecutive 12-month period.
 - h. The amount of water used to dilute the boiler solvent cleaning solution in gallons per year calculated monthly as the sum of each consecutive 12-month period.
 - i. Test results for metals in boiler cleaning solvent solution as required by Condition 8 of this permit.
 - j. Opacity monitor data as required by Condition 23 of this permit.
 - k. Electrostatic precipitator inspection records.
 - l. Combustion turbine visible emissions evaluations.
 - m. All emissions calculations relied upon by the permittee to demonstrate compliance with the emission limits set forth in this permit including all assumptions and emission factors used.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent 5-year period.

(9 VAC 5-50-50, 9 VAC 5-80-110, Condition 16 of 10/20/98 PSD permit, and Condition 15 of 4/25/95 permit)

36. Opacity monitor data recorded during the combined burning of coal and consumption of boiler solvent cleaning solution shall be maintained as separate records.

(9 VAC 5-80-110 and Condition 9 of 4/25/95 permit)

37. Emissions from Units 3 and 4 shall be controlled by proper operation and maintenance. Units 3 and 4 operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum. The permittee shall maintain records of the required training including a statement of time, place, and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for all air pollution control equipment. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on-site and made available for inspection by DEQ.

(9 VAC 5-80-110 and Condition 14 of 4/25/95 permit)

D. Testing

38. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Test ports shall be provided at the Unit 3 stack and the Unit 4 stack. Upon request from the Department, test ports shall be provided at all other appropriate locations.

(9 VAC 5-50-30, 9 VAC 5-80-110, Condition 13 of 4/25/95 permit, and Condition 14 of the 10/20/98 PSD permit)

39. If testing to demonstrate compliance is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

The following table applies only to those pollutants that have emission limits.

Pollutant	Test Method (40 CFR Part 60, Appendix A)*
VOC	EPA Methods 18, 25, 25a
VOC Content	EPA Methods 24, 24a
NO _x	EPA Method 7
SO ₂	EPA Method 6
CO	EPA Method 10
PM/PM-10	EPA Method 5, 17, 201
Visible Emission	EPA Method 9, 22

*Alternative equivalent methods may be utilized upon prior written DEQ approval.
(9 VAC 5-80-110)

E. Reporting

40. The permittee shall submit quarterly excess emission reports for SO₂ and NO_x from Units 1 and 2 to the Director, Tidewater Regional Office postmarked within 30 days after the end of each calendar quarter. The content and format of the quarterly reports shall be arranged with the Director, Tidewater Regional Office.
(9 VAC 5-80-110 and Condition 9 of 10/20/98 PSD permit)
41. The permittee shall submit the results and any supporting data related to ozone season NO_x measurements or calculations to the Director, Tidewater Regional Office postmarked by October 15 of each calendar year.
(9 VAC 5-80-110 and Conditions 3 and 4 of 9/3/96 Ozone Season permit)
42. The permittee shall comply with each of the monitoring, recordkeeping, and reporting requirements as specified in the Phase II Acid Rain Operating Permit (Attachment 1) for Units 1, 2, 3, and 4.
(9 VAC 5-80-110, 9 VAC 5 Chapter 80 - Article 3, and 12/16/98 Phase II Acid Rain Operating Permit)

IV. Process Equipment Requirements – (Coal and Fly Ash Handling)

A. Limitations

43. Particulate emissions from the coal handling process shall be controlled by wet suppression as necessary. The permittee shall comply with the applicable provisions of 40 CFR 60 Subpart Y.
(9 VAC 5-80-110, 40 CFR 60.250, and Specific Condition 4 of 10/20/98 PSD permit)

44. Particulate emissions from the fly ash handling system shall be controlled by cyclones and filters in series.
(9 VAC 5-80-110 and Specific Condition 5 of 6/18/84 permit)

45. Particulate emissions from the fly ash silo loading stations shall be controlled by wet suppression as necessary.
(9 VAC 5-80-110 and Specific Condition 6 of 6/18/84 permit)

46. Fugitive dust emissions from coal handling/storage for Units 1 and 2 are specified below:

PM-10	6.4 lbs/hr	3.0 tons/yr (12-mo. rolling avg.)
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These emissions are derived from the estimated overall emission contribution and are included for emission inventory purposes. Compliance shall be determined as stated in Condition 43 of this permit.
(9 VAC 5-80-110 and Specific Condition 13 of 10/20/98 PSD permit)

47. Visible emissions from the coal handling and fly ash handling systems shall not exceed twenty (20%) percent opacity at all times.
(9 VAC 5-50-80, 9 VAC 5-80-110, and 40 CFR 60.252(c))

48. Emissions from the operation of each filter of the fly ash handling process shall not exceed the limits specified below:

PM-10	0.6 lbs/hr	0.5 tons/yr (12-mo. rolling avg.)
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Compliance with the emission limitations above shall be demonstrated by compliance with the provisions of Conditions 44, 45, 47, 49, and 50 of this permit.

(9 VAC 5-80-110 and Specific Condition 4 of 6/18/84 Permit)

B. Monitoring

49. Each fabric filter shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times. At least one time per week, an observation of the presence of visible emissions from the fabric filter exhausts shall be made. If visible emissions are observed, the permittee shall take timely corrective action such that the units resume operation with no visible emissions, or perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the fabric filters do not exceed twenty percent (20%) opacity. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed 20 percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the fabric filters resume operation with visible emissions of 20 percent or less. The permittee shall maintain an observation log to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, any VEE recordings, and any necessary corrective action. A condition assessment shall be conducted on each cyclone annually by the permittee to insure the equipment is in proper operating condition.

(9 VAC 5-80-110)

50. At least one time per week, an observation of the presence of visible emissions from the coal handling and fly ash handling systems shall be made. If visible emissions are observed, the permittee shall take timely corrective action such that the systems resume operation with no visible emissions, or perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the systems do not exceed twenty percent (20%) opacity. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed 20 percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the systems resume operation with visible emissions of 20 percent or less. The permittee shall maintain an observation log to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, any VEE recordings, and any necessary corrective action.

(9 VAC 5-80-110)

C. Recordkeeping

51. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:

- a. Logbook to be maintained on-site including weekly opacity observations and any excess opacity episodes and corrective measures taken and monthly fabric filter pressure drop readings.
- b. Records of annual cyclone inspections.
- c. Documentation that the facility is in compliance with 40 CFR 60 Subpart Y.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent 5-year period.

(9 VAC 5-50-50 and 9 VAC 5-80-110)

52. All air pollution control equipment operators shall be trained and certified in the proper operation of all such equipment. The permittee shall maintain records of the required training and certification. Certification of training shall consist of a statement of time, place, and nature of training provided. A maintenance schedule shall be established for as such equipment and made available to DEQ for review. Records of training, service, and maintenance shall be maintained on-site for the most recent 5-year period.

(9 VAC 5-80-110 and General Conditions 6 and 7 of 6/18/84 permit)

D. Testing

53. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.

(9 VAC 5-50-30 and 9 VAC 5-80-110)

54. If testing to demonstrate compliance is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

The following table applies only to those pollutants that have emission limits.

Pollutant	Test Method (40 CFR Part 60, Appendix A)*
VOC	EPA Methods 18, 25, 25a
VOC Content	EPA Methods 24, 24a
NO _x	EPA Method 7
SO ₂	EPA Method 6
CO	EPA Method 10
PM/PM-10	EPA Method 5, 17, 201
Visible Emission	EPA Method 9, 22

*Alternative equivalent methods may be utilized upon prior written DEQ approval.

(9 VAC 5-80-110)

V. Facility Wide Conditions

A. Limitations

55. Unless otherwise specified in this permit, visible emissions shall not exceed twenty (20%) percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty (60%) percent opacity.
(9 VAC 5-40-80 and 9 VAC 5-80-110)

56. The facility is subject to the following federal regulatory requirements:

- a. 40 CFR 61 - Asbestos. Details requirements for asbestos removal at demolition and renovation activities. If such activities should occur, the facility shall comply with the applicable provisions.
- b. 40 CFR 63 - National Emissions Standards for Hazardous Air Pollutants for Source Categories. No standards have currently been promulgated for this facility. However, Subparts YYYY (Combustion Turbines) and ZZZZ (Reciprocating Internal Combustion Engines) are **future applicable requirements**.
- c. 40 CFR 64 - Compliance Assurance Monitoring (CAM) Requirements. Details requirements for Compliance Assurance Monitoring.
- d. 40 CFR 68 - Chemical Accident Prevention Provisions. Describes requirements for Risk Management Plans.
- e. 40 CFR 70 - Operating Permits Regulation. Institutes operating permit requirements.
- f. 40 CFR 72 - Acid Rain Permits Regulation. Establishes Acid Rain Program requiring Phase I and Phase II permits.
- g. 40 CFR 73 - Sulfur Dioxide Allowance System. Establishes SO₂ allowance allocations, tracking, transfers, and auctions.
- h. 40 CFR 75 - Continuous Emission Monitoring. Establishes continuous emissions monitoring provisions including installation, certification, operation, and maintenance and quality assurance.
- i. 40 CFR 76 - Acid Rain Nitrogen Oxides Emission Reduction Program. Establishes NO_x emissions limitations for coal-fired utility units subject to an Acid Rain emissions limitation or reduction requirement for SO₂ under Phase I or Phase II.

- j. 40 CFR 77 - Excess Emissions. Requires offsets for excess emissions of SO₂ and provides penalties for excess emissions of SO₂ and NO_x.
 - k. 40 CFR 78 - Appeal Procedures. Establishes appeal procedures for the Acid Rain Program.
 - l. 40 CFR 82 - Stratospheric Ozone Protection. Subpart F provides requirements for facilities that utilize CFC's in air conditioning units, chillers, etc. to utilize licensed technicians for repair.
 - m. 40 CFR 97 - NO_x Budget. Outlines emissions limitations and compliance schedules for NO_x reductions.
57. The facility is subject to the following Virginia regulatory requirements:
- a. 9 VAC 5-20-50 - Variance.
 - b. 9 VAC 5-20-70 - Circumvention.
 - c. 9 VAC 5-20-160 - Source registration.
 - d. 9 VAC 5-20-180 - Good maintenance practices and start-up, shutdown, and malfunction procedures.
 - e. 9 VAC 5-40-20 - Compliance for existing sources.
 - f. 9 VAC 5-40-30 - Emission testing for existing sources.
 - g. 9 VAC 5-40-40 - Existing source monitoring.
 - h. 9 VAC 5-40-50 - Existing source notification, records, and reporting.
 - i. 9 VAC 5-40-80 - Existing source standard for visible emissions (opacity).
 - j. 9 VAC 5-40-90 - Standard for fugitive emissions for existing sources.
 - k. 9 VAC 5-40-100 - Monitoring.
 - l. 9 VAC 5-40-900 - Existing source standards for PM.
 - m. 9 VAC 5-40-910 - PM emission allocation system.
 - n. 9 VAC 5-40-920 - Determination of collection equipment efficiency factor.
 - o. 9 VAC 5-40-930 - Existing source standards for SO₂.

- p. 9 VAC 5-40-940 - Existing source visible emission standards.
- q. 9 VAC 5-40-950 - Existing source fugitive dust/emissions standards.
- r. 9 VAC 5-50-20 - New source compliance.
- s. 9 VAC 5-50-30 - New source emission testing.
- t. 9 VAC 5-50-40 - New source monitoring.
- u. 9 VAC 5-50-50 - Notification, records, and reporting.
- v. 9 VAC 5-50-90 - New source standard for fugitive dust/emissions.
- w. 9 VAC 5-50-240 - Standards of performance for stationary sources.
- x. 9 VAC 5-50-260 - Standard for new and modified stationary sources (BACT).
- y. 9 VAC 5-50-290 - Visible emissions standard for new and modified stationary sources.
- z. 9 VAC 5-50-300 - Fugitive dust/emissions standards for new and modified stationary sources.
- aa. 9 VAC 5-80-50 - Operating permit requirements.
- bb. 9 VAC 5-80-310 - Operating permit fees.
- cc. 9 VAC 5-80-360 - Acid Rain operating permits.
- dd. 9 VAC 5-80-1700 & 1710 - Permits for Major Stationary Sources and Major Modifications Locating in Prevention of Significant Deterioration Areas.
- ee. 9 VAC 5-80-2000 - Permits for Major Stationary Sources and Major Modifications Locating in Non-attainment Areas.
- ff. 9 VAC 5-140-10 - Emissions trading.

VI. Syn Fuel Plant

A. Limitations

58. Equipment List - Equipment to be constructed and operated consists of:

- one (1) front end loader (Unit Ref. No. FEL-1) rated at 400 tons of coal per hour;
- one (1) coal crusher (Unit Ref. No. CR-1) rated at 400 tons of coal per hour (NSPS Subpart Y);
- one (1) raw coal reclaim chain conveyor (Unit Ref. No. RC-1) rated at 400 tons of coal per hour;
- two (2) raw polymer tanks A and B (Unit Ref. Nos. PT-1 and PT-2) each with a storage capacity of 12,000 gallons;
- one (1) polymer mixing tank (Unit Ref. No. PMT-1) with a storage capacity of 2,000 gallons;
- one (1) finished polymer storage tank (Unit Ref. No. PT-3) with a storage capacity of 16,000 gallons;
- one (1) process water storage tank (Unit Ref. No. WT-1) with a storage capacity of 3,000 gallons;
- one (1) water storage tank (Unit Ref. No. WT-2) with a storage capacity of 6,000 gallons;
- one (1) mixer feed belt conveyor (Unit Ref. No. C-1) rated at 400 tons of coal per hour;
- one (1) mixer diversion gate (Unit Ref. No. G-1);
- one (1) synfuel pug mixer - Pug Mixer A (Unit Ref. No. FM-1) rated at 200 tons of coal per hour;
- one (1) synfuel pug mixer - Pug Mixer B (Unit Ref. No. FM-2) rated at 200 tons of coal per hour;
- one (1) briquetter - Briquetter A (Unit Ref. No. BR-1) rated at 200 tons of coal per hour;
- one (1) briquetter - Briquetter B (Unit Ref. No. BR-2) rated at 200 tons of coal per hour;
- one (1) product collecting conveyor (Unit Ref. No. C-2) rated at 400 tons of coal per hour;
- one (1) product radial stacker (Unit Ref. No. PS-1) rated at 400 tons of coal per hour;
- two (2) product storage piles (Unit Ref. No. P-1)

(9 VAC 5-80-110, 9 VAC 5-80-1180, and Condition 2 of the October 15, 2004, NSR permit)

59. **Emission Controls** – Particulate emissions from the transfer point between the raw coal reclaim conveyor (Unit Ref. No. RC-1) and the crusher (Unit Ref. No. CR-1) shall be controlled by partial enclosure and water spray suppression, or equivalent. The water spray suppression system shall be provided with adequate access for inspection.
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 3 of the October 15, 2004, NSR permit)
60. **Emission Controls** – Particulate emissions from the crusher (Unit Ref. No. CR-1) shall be controlled by full enclosure, or equivalent. The system shall be provided with adequate access for inspection.
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 4 of the October 15, 2004, NSR permit)
61. **Emission Controls** – Particulate emissions from the transfer point between the crusher (Unit Ref. No. CR-1) and the mixer feed belt conveyor (Unit Ref. No. C-1) shall be controlled by partial enclosure and water spray suppression, or equivalent. The water spray suppression system shall be provided with adequate access for inspection.
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 5 of the October 15, 2004, NSR permit)
62. **Emission Controls** – Particulate emissions from the transfer point between the mixer feed belt conveyor (Unit Ref. No. C-1) and the mixer diversion gate (Unit Ref. No. G-1) shall be controlled by partial enclosure and a dust collector, or full enclosure with wet suppression, or equivalent. The dust collector, if applicable, shall be provided with adequate access for inspection.
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 6 of the October 15, 2004, NSR permit)
63. **Emission Controls** – Particulate emissions from the synfuel pug mixer inlets (Unit Ref. Nos. FM-1 and FM-2) shall be controlled by full enclosure, or equivalent. The transfer points between the synfuel pug mixers and the briquetters (Unit Ref. Nos. BR-1 and BR-2) shall be controlled by an enclosed chute. The system shall be provided with adequate access for inspection.
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 7 of the October 15, 2004, NSR permit)
64. **Emission Controls** – Particulate emissions from the transfer points between the briquetters (Unit Ref. Nos. BR-1 and BR-2) and the product collecting conveyor (Unit Ref. No. C-2) shall be controlled by partial enclosure and a dust collector, or full enclosure with wet suppression, or equivalent. The dust collector, if applicable, shall be provided with adequate access for inspection.
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 8 of the October 15, 2004, NSR permit)

65. **Emission Controls** – Particulate emissions from the transfer points between the product collecting conveyor (Unit Ref. No. C-2) and the product radial stacker (Unit Ref. No. PS-1) and between the product radial stacker and the product storage piles (Unit Ref. No. P-1) shall be controlled by partial enclosure and water spray suppression, or equivalent. The water spray suppression system shall be provided with adequate access for inspection.

(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 9 of the October 15, 2004, NSR permit)

66. **Emission Controls** - Unless otherwise specified, dust emission controls specific to synfuel operations shall include the following or equivalent as a minimum:

- a. Dust from all material handling, transfers, loadouts and traffic areas shall be controlled by wet suppression or equivalent (as approved by the Director, Tidewater Regional Office). There shall be no exemption from this requirement due to cold weather.
- b. All material being stockpiled shall be kept moist to control dust during storage and handling or covered at all times to minimize emissions.
- c. Haul roads shall be controlled by wet suppression or equivalent (as approved by the DEQ).
- d. Reasonable precautions shall be taken to prevent deposition of coal dust and dirt on public roads and subsequent dust emissions. Coal and dirt spilled or tracked onto public paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 10 of the October 15, 2004, NSR permit)

67. **Throughput** - The annual throughput of coal at the synfuel facility shall not exceed 2,000,000 tons per year, calculated monthly as the sum of each consecutive 12-month period.

(9 VAC 5-80-110, 9 VAC 5-80-1180, and Condition 12 of the October 15, 2004, NSR permit)

68. **Throughput** - The synfuel facility shall consume no more than 274 gallons per hour and 1,369,700 gallons per year of the latex binders Covol 298-1, SB-3200, FTH-300 or equivalent latex binder (undiluted, as delivered). Hourly binder consumption shall be calculated as specified in Condition 77.b. of this permit. Annual binder consumption shall be calculated monthly as the sum of each consecutive 12-month period.

(9 VAC 5-80-110, 9 VAC 5-80-1180, and Condition 13 of the October 15, 2004, NSR permit)

69. **Throughput** - The synfuel facility shall consume no more than 5,709,700 gallons per year of HES asphaltic binder, or equivalent asphaltic binder (undiluted, as delivered). Annual consumption shall be calculated monthly as the sum of each consecutive 12-month period.

(9 VAC 5-80-110, 9 VAC 5-80-1180, and Condition 14 of the October 15, 2004, NSR permit)

70. **Emission Limits** - Emissions from the operation of the coal/synfuel processing and handling equipment shall not exceed the limits specified below:

PM	30.3 lbs/hr	30.8 tons/year
PM-10	7.7 lbs/hr	1.7 tons/year
VOC	4.4 lbs/hr	11.0 tons/year

These emissions are derived from the estimated overall emissions contribution.

Compliance shall be determined as stated in Conditions 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 71, 72, and 71-74 of this permit.

(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 15 of the October 15, 2004, NSR permit)

71. **Visible Emissions Limit** – Visible emissions specific to synfuel operations from the crushing and conveyor transfer sources shall not exceed 10% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

(9 VAC 5-80-110, 9 VAC 5-50-80, 9 VAC 5-50-260, and Condition 17 of the October 15, 2004, NSR permit)

72. **Visible Emissions Limit** – Visible emissions from the dust collector stack, if applicable, shall not exceed 5% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

(9 VAC 5-80-110, 9 VAC 5-50-80, 9 VAC 5-50-260, and Condition 18 of the October 15, 2004, NSR permit)

73. **Requirements by Reference** – Except where this permit is more restrictive than the applicable requirement, the NSPS equipment as described in Condition 2 shall be operated in compliance with the requirements of 40 CFR 60, Subpart Y.

(9 VAC 5-80-110, 9 VAC 5-50-400, 9 VAC 5-50-410, and Condition 19 of the October 15, 2004, NSR permit)

B. Monitoring

74. Monitoring Devices - The dust collector for the synfuel plant, if applicable, shall be equipped with devices to continuously measure the differential pressure drop across the dust collector. Each monitoring device shall be installed, maintained, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the dust collector is operating.

(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-20 C, 9 VAC 5-50-260, and Condition 23 of the October 15, 2004, NSR permit)

75. Monitoring Device Observation - The control monitoring device used to continuously measure pressure drop across the dust collector, if applicable, shall be observed by the permittee at least once each calendar week unless there was no operation during the period (which must be noted in the records). The permittee shall establish an acceptable range for the pressure drop across the dust collector taking into account manufacturer's recommendations and good engineering practice. Readings outside the acceptable range shall indicate the need for corrective action. The permittee shall maintain records of the observations including the date, time, observation results, the observer's name, the acceptable range, and corrective actions taken (if any).

(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-20 C, 9 VAC 5-50-260, and Condition 24 of the October 15, 2004, NSR permit)

76. Opacity Monitoring - The permittee shall check for visible emissions from the dust collector stack, if applicable, during normal operation with a frequency of not less than once each month. The presence of visible emissions shall indicate the need for corrective action. The permittee shall maintain records of observations including the date, time, observation results, the observer's name, and corrective actions taken (if any).

(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-20 C, 9 VAC 5-50-260, and Condition 25 of the October 15, 2004, NSR permit)

C. Recordkeeping

77. On-Site Records - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:

- a. The annual throughput of coal processed through the facility in tons, calculated monthly as the sum of each consecutive 12-month period.

- b. The hourly and annual consumption of HES asphaltic binder or equivalent asphaltic binder (undiluted, as delivered). Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.
- c. MSDS sheets for the HES asphaltic binder or equivalent asphaltic binder.
- d. Results of all visible emissions evaluations (VEEs).
- e. All monitoring records as specified in Conditions 74, 75, and 76 of this permit.

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110, 9 VAC 5-50-50, and Condition 21 of the October 15, 2004, NSR permit)

VII. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
IS-1	Unit 2 Combustion Turbine starter diesel engine	9 VAC 5-80-720 B	CO, NO _x , PM10, SO ₂ , VOC	360 horsepower
IS-2	Unit 4 Combustion Turbine starter diesel engine	9 VAC 5-80-720 B	CO, NO _x , PM10, SO ₂ , VOC	360 horsepower
IS-3	Unit 6 Combustion Turbine starter diesel engine	9 VAC 5-80-720 B	CO, NO _x , PM10, SO ₂ , VOC	360 horsepower
IS-4	Unit 7 Combustion Turbine starter diesel engine	9 VAC 5-80-720 B	CO, NO _x , PM10, SO ₂ , VOC	655 horsepower
IS-5	Unit 8 Combustion Turbine starter diesel engine	9 VAC 5-80-720 B	CO, NO _x , PM10, SO ₂ , VOC	655 horsepower
IS-6	Unit 9 Combustion Turbine starter diesel engine	9 VAC 5-80-720 B	CO, NO _x , PM10, SO ₂ , VOC	655 horsepower
IS-7	Unit 10 Combustion Turbine starter diesel engine	9 VAC 5-80-720 B	CO, NO _x , PM10, SO ₂ , VOC	655 horsepower

IS-8	Combustion Turbine Diesel Fuel Handling Systems	9 VAC 5-80-720 B	VOC	40 to 75 gallons
IS-9	Combustion Turbine Lube Oil Systems	9 VAC 5-80-720 B	VOC	151 to 2,000 gallons
IS-10	Steam Turbine Lube Oil Systems	9 VAC 5-80-720 B	VOC	112 to 5,835 gallons
IS-11	Induced Draft Fan Lube Oil Systems	9 VAC 5-80-720 B	VOC	<1,000 gallons each
IS-12	Boiler Feed Pump Lube Oil Systems	9 VAC 5-80-720 B	VOC	<1,000 gallons each
IS-13	Dirty and Clean Oil Storage Tanks	9 VAC 5-80-720 B	VOC	5,400 and 9,000 gallons
IS-14	Miscellaneous Lube Oil Storage Tanks	9 VAC 5-80-720 B	VOC	275 to 1,500 gallons
IS-15	Kerosene Storage Tank	9 VAC 5-80-720 B	VOC	275 gallons
IS-16	Propane Storage Tanks (4)	9 VAC 5-80-720 B	VOC	1,000 gallons each
IS-17	Heavy Metals pond lime mixing tanks (2)	9 VAC 5-80-720 B	PM/PM-10	11,200 gallons each
IS-18	Parts Degreasers	9 VAC 5-80-720 B	VOC	<100 gallons each
IS-19	Combustion Turbine No. 2 Fuel Oil Tank	9 VAC 5-80-720 B	VOC	1,000 gallons each
IS-20	Station No. 2 Fuel Oil Tank No. 1	9 VAC 5-80-720 B	VOC	1,501,399 gallons
IS-21	Station No. 2 Fuel Oil Tank No. 2	9 VAC 5-80-720 B	VOC	434,921 gallons
IS-22	Diesel Fueling Station and Underground Tank	9 VAC 5-80-720 B	VOC	6,000 gallons
IS-23	Gasoline Fueling Station and Underground Tank	9 VAC 5-80-720 B	VOC	6,000 gallons
IS-24	Emergency Generator Propane Storage Tank	9 VAC 5-80-720 B	VOC	500 gallons
IS-25	Turbine Electro-Hydraulic Control System (EHC) tanks	9 VAC 5-80-720 B	VOC	110 gallons each
IS-26	Propane Coal Car Track Heaters	9 VAC 5-80-720 C	CO, NO _x , SO ₂ , PM-10, VOC	60,000 Btu each
IS-27	Emergency Generator	9 VAC 5-80-720 B	CO, NO _x , SO ₂ , PM-10, VOC	30 kW
IS-28	Emergency Generator	9 VAC 5-80-720 B	CO, NO _x , SO ₂ , PM-10, VOC	315 horsepower
IS-29	North Plant Emergency Diesel Fire Pump	9 VAC 5-80-720 B	CO, NO _x , SO ₂ , PM-10, VOC	155 horsepower
IS-30	Propane Emergency Generator	9 VAC 5-80-720 B	CO, NO _x , SO ₂ , PM-10, VOC	82 horsepower
IS-31	Miscellaneous Welding Generators and Welding Compressors	9 VAC 5-80-720 B	CO, NO _x , SO ₂ , PM-10, VOC	<40 horsepower

IS-32	Diesel Generator Light Unit	9 VAC 5-80-720 B	CO, NO _x , SO ₂ , PM-10, VOC	20 horsepower
IS-33	Pressure Washer (Parts Cleaner) with pump	9 VAC 5-80-720 C	CO, NO _x , SO ₂ , PM-10, VOC	328,000 BTU/hour
IS-34	Miscellaneous Small Fuel Burning Equipment	9 VAC 5-80-720 C	CO, NO _x , SO ₂ , PM-10, VOC	various

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

VIII. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
Existing Sources	40 CFR 60 Subparts A, B, C, D, Da, Db, Dc, K, Ka, Kb, and GG; 40 CFR 63 - All Subparts.	No emissions sources at this facility are subject to these NSPS or current MACT requirements. Facility is a HAP synthetic minor source.
Non-Affected Sources	40 CFR 72 through 78	Combustion turbines are not subject to the Federal Acid Rain Program.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-140)

IX. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-490 N)

B. Permit Expiration

1. This permit has a fixed term not to exceed five years. The expiration date shall be the date not more than five years from the effective date of the permit. Unless the owner submits a timely and complete renewal application to DEQ consistent with 9 VAC 5-80-430, the right of the facility to operate shall terminate upon permit expiration.
2. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
3. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 3, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-510.
4. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-430 for a renewal permit, except in compliance with a permit issued under Article 3, Part II of 9 VAC 5 Chapter 80.
5. If an applicant submits a timely and complete application under section 9 VAC 5-80-430 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-500, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
6. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-430 shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-430 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.
(9 VAC 5-80-490 F)
2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
(9 VAC 5-80-490 F)
3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-430 G and shall include:
 - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 inclusive and July 1 to December 31 inclusive.
 - b. All deviations from permit requirements. For purposes of this permit, a deviation includes, but is not limited to:
 - Exceedance of emissions limitations or operational restrictions,
 - Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
 - Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
 - c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that “no deviations from permit requirements occurred during this semi-annual reporting period.”
(9 VAC 5-80-490 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with VAC 5-80-430 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
2. A description of the means for assessing or monitoring the compliance of the source with its emissions limitations, standards, and work practices.
3. The identification of each term or condition of the permit that is the basis of the certification.
4. Consistent with subsection 9 VAC 5-80-490 E, the method or methods used for determining the compliance status of the source at the time of certification and over the certification period.
5. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
6. The status of compliance with the terms and conditions of this permit for the certification period.
7. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)
U.S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029.
(9 VAC 5-80-490 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Tidewater Region within four daytime business hours, after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition IX.C.3. of this permit.
(9 VAC 5-80-490 F.2)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after discovery, notify the Director, Tidewater Region by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14-days provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Tidewater Region.
(9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-490 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(9 VAC 5-80-490 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-490 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

(9 VAC 5-80-490 G and L, 9 VAC 5-80-550, and 9 VAC 5-80-660)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.

(9 VAC 5-80-490 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the board, within a reasonable time, any information that the board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the board along with a claim of confidentiality.

(9 VAC 5-80-490 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-430 G.9.
(9 VAC 5-80-490 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-360 through 9 VAC 5-80-700 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 et seq. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-490 H)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited, to the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and
5. The prompt removal of spilled or traced dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
(9 VAC 5-40-20 E, 9 VAC 5-50-90, and 9 VAC 5-50-50)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-40-20 E and 9 VAC 5-50-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-500 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80 Article 3.

(9 VAC 5-80-490 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-490 K.2)

R. Reopening For Cause

The permit shall be reopened by the board if additional federal requirements become applicable to a major source with a remaining permit term of three or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-430 F.

1. The permit shall be reopened if the board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
2. The permit shall be reopened if the administrator or the board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
3. The permit shall not be reopened by the board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-490 D.
(9 VAC 5-80-490 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9 VAC 5-80-510 G)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another or from one piece of equipment to another.
(9 VAC 5-80-520)
2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-560.
(9 VAC 5-80-520)

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-560.
(9 VAC 5-80-520)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-490 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.
4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.
(9 VAC 5-80-650)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 3. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any of the grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-490 G & L, 9 VAC 5-80-640 and 9 VAC 5-80-660)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submits such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-430 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substance subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A - F)

Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
(9 VAC 5-60-70 and 9 VAC 5-80-490 A)

Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

AA. Changes to Permits for Emissions Trading

No permit revision shall be required, under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9 VAC 5-80-490 I)

BB. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-490 except subsection N shall be included to determine compliance.
2. The permit shield described in 9 VAC 5-80-500 shall extend to all terms and conditions that allow such increases and decreases in emissions.
3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-360 through 9 VAC 5-80-700.
(9 VAC 5-80-490 I)

X. Title IV (Phase II Acid Rain) Permit Allowances and Requirements

Phase II Permit - The attached Phase II permit (Effective date October 16, 2002) is incorporated into this permit by reference. The owners and operators of the source shall comply with the standard requirements and special provisions set forth in the application.
(9 VAC 5-80-440 and 9 VAC 5-80-490 A.4.a and c, B, C, E, F, M, O and P)

XI. NO_x Budget Trading Program Requirements

A. NO_x Budget Permit General Conditions

1. A review of the air emission units included in this permit approval has determined that the equipment listed in the following table meets the definition of a NO_x Budget Unit and falls subject to the NO_x Budget emission limitations under 9 VAC 5-140-40 or for opt-in sources 9 VAC 5-140-800. As required by 9 VAC 5-140-200 A, each NO_x Budget source is required to have a federally enforceable permit. This section of the document represents the NO_x Budget permit.
(9 VAC 5-140-40) or (9 VAC 5-140-800)
2. The NO_x Budget permit will be administrated by the VADEQ under the authority of 9 VAC 5-80-360 et seq., and 9 VAC 5-140-10 et seq.
(9 VAC 5-140-200 A)
3. The following air emission unit(s) have been determined to meet the applicability requirements as provided in 9 VAC 5-140-40 A.1 and A.2. Units that do not meet this definition, are not defined as 25-Ton Exemption Units and are not permanently shutdown can be included in the NO_x Budget Trading program as “opt-in” air emission sources.
(9 VAC 5-140-40 A) for Opt-In sources (9 VAC 5-140-800).

Table X – 1 Facility NO_x Budget Units				
Facility Unit ID	Unit NATS Code	Unit Name and description	Maximum Heat Capacity (MMBtu/hr)	Maximum Generation Capacity (megawatts)
1	003803000001	Chesapeake Energy Center - Unit 1	1300 (nominal)	130 (nominal)
2	003803000002	Chesapeake Energy Center - Unit 2	1300 (nominal)	130 (nominal)
3	003803000003	Chesapeake Energy Center - Unit 3	1663 (nominal)	181 (nominal)
4	003803000004	Chesapeake Energy Center - Unit 4	2346 (nominal)	255 (nominal)

4. This NO_x Budget permit will become effective on May 31, 2004.
(9 VAC 5-140-240.1)

B. Standard Requirements

1. Continuous Monitoring requirements.

- a. The owners and operators and, to the extent applicable, the NO_x authorized account representative of each NO_x Budget source and each NO_x Budget unit at the source shall comply with the monitoring requirements of 9 VAC 5-140-700 et seq. (9 VAC 5-140-60 B.1)
- b. The emissions measurements recorded and reported in accordance with 9 VAC 5-140-700 et seq. and Subparts H of 40 CFR 75 and 40 CFR 97 shall be used to determine compliance by the unit with the NO_x Budget emissions limitation under Conditions X.B.2.a. through X.B.2.h. The following approved methods will be used to calculate NO_x Control Period and Annual emission rates: (9 VAC 5-140-60 B.2)

Pollutant or Stack Parameter	CEM Monitoring Methods 40 CFR 75
NO _x Concentration	75.12
CO ₂ /Diluent Gas	75.10(a)(2)
Stack Gas Velocity/Flow	75.11
Moisture	75.12(b)

2. Nitrogen oxides requirements.

- a. The owners and operators of each NO_x Budget source and each NO_x Budget unit at the source shall hold NO_x allowances available for compliance deductions under 9 VAC 5-140-540 A, B, E, or F, as of the NO_x allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NO_x emissions for the control period from the unit, as determined in accordance with Article 8 (9 VAC 5-140-700 et seq.), plus any amount necessary to account for actual utilization under 9 VAC 5-140-420 E for the control period or to account for excess emissions for a prior control period under 9 VAC 5-140-540 D or to account for withdrawal from the NO_x Budget Trading Program, or a change in regulatory status, of a NO_x Budget opt-in unit under 9 VAC 5-140-860 or 9 VAC 5-140-870. (9 VAC 5-140-60 C.1)
- b. Each ton of nitrogen oxides emitted in excess of the NO_x Budget emissions limitation shall constitute a separate violation of the Clean Air Act, and applicable Virginia Air Pollution Control law. (9 VAC 5-140-60 C.2)
- c. A NO_x Budget unit shall be subject to the requirements under 9 VAC 5-140-60 C.1 starting on the later of May 31, 2004 or the date on which the unit commences operation. (9 VAC 5-140-60 C.3)

- d. NO_x allowances shall be held in, deducted from, or transferred among NO_x Allowance Tracking System accounts in accordance with 9 VAC 5-140-400 et seq., 9 VAC 5-140-500 et seq., 9 VAC 5-140-600 et seq., and 9 VAC 5-140-800 et seq..
(9 VAC 5-140-60 C.4)
 - e. A NO_x allowance shall not be deducted, in order to comply with the requirements under 9 VAC 5-140-60 C.1 for a control period in a year prior to the year for which the NO_x allowance was allocated.
(9 VAC 5-140-60 C.5)
 - f. A NO_x allowance allocated by the permitting authority or the administrator under the NO_x Budget Trading Program is a limited authorization to emit one ton of nitrogen oxides in accordance with the NO_x Budget Trading Program. No provision of the NO_x Budget Trading Program, the NO_x Budget permit application, the NO_x Budget permit, or an exemption under 9 VAC 5-140-50 and no provision of law shall be construed to limit the authority of the United States or the State to terminate or limit such authorization.
(9 VAC 5-140-60 C.6)
 - g. A NO_x allowance allocated by the permitting authority or the administrator under the NO_x Budget Trading Program does not constitute a property right.
(9 VAC 5-140-60 C.7)
 - h. Upon recordation by the administrator under 9 VAC 5-140-500 et seq., 9 VAC 5-140-600 et seq., or 9 VAC 5-140-800 et seq., every allocation, transfer, or deduction of a NO_x allowance to or from a NO_x Budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, any NO_x Budget permit of the NO_x Budget unit by operation of law without any further review.
(9 VAC 5-140-60 C.8)
3. Excess emissions requirements.
- a. The owners and operators of a NO_x Budget unit that has excess emissions in any control period shall:
 - 1. Surrender the NO_x allowances required for deduction under 9 VAC 5-140-540 D 1; and
 - 2. Pay any fine, penalty, or assessment or comply with any other remedy imposed under 9 VAC 5-140-540 D 3.
- (9 VAC 5-140-60 D)

C. Recordkeeping and Reporting Requirements.

The following requirements concerning recordkeeping and reporting shall apply:

1. Unless otherwise provided, the owners and operators of the NO_x Budget source and each NO_x Budget unit at the source shall keep on site at the source each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the permitting authority or the administrator.
(9 VAC 5-140-60 E.1)
 - a. The account certificate of representation for the NO_x authorized account representative for the source and each NO_x Budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 9 VAC 5-140-130; provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new account certificate of representation changing the NO_x authorized account representative.
(9 VAC 5-140-60 E.1)
 - b. All emissions monitoring information, in accordance with 9 VAC 5-140-700 et seq. of this part; provided that to the extent that 9 VAC 5-140-700 et seq. provides for a three-year period for recordkeeping, the three-year period shall apply.
(9 VAC 5-140-60 E.1)
 - c. Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_x Budget Trading Program.
(9 VAC 5-140-60 E.1)
 - d. Copies of all documents used to complete a NO_x Budget permit application and any other submission under the NO_x Budget Trading Program or to demonstrate compliance with the requirements of the NO_x Budget Trading Program.
(9 VAC 5-140-60 E.1)
2. The NO_x authorized account representative of a NO_x Budget source and each NO_x Budget unit at the source shall submit the reports and compliance certifications required under the NO_x Budget Trading Program, including those under 9 VAC 5-140-300 et seq., 9 VAC 5-140-700 et seq., or 9 VAC 5-140-800 et seq.
(9 VAC 5-140-60 E.2)

D. Testing for CEM Certification

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports will be provided at the appropriate locations.
(9 VAC 5-40-30 and 9 VAC 5-140-710)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant or Stack Parameter	CEM Certification Test Method 40 CFR 60
NO _x Concentration	USEPA Method 7, 7A, 7C, 7D, 7E excluding exception in 5.1.2 of 7E. 7E must measure NO & NO ₂ .
Opacity	USEPA Method 9
Moisture	USEPA Method 4
Stack Gas Velocity/Flow	USEPA Method 2 or alternatives (not 2B or 2E)
Diluent gas (CO ₂ /O ₂)	USEPA Method 3, 3A, 3B

(9 VAC 5-140-700 to 710)

E. Liability

1. Any person who knowingly violates any requirement or prohibition of the NO_x Budget Trading Program, a NO_x Budget permit, or an exemption under 9 VAC 5-140-50 shall be subject to enforcement pursuant to applicable State or Federal law.
(9 VAC 5-140-60 F.1)
2. Any person who knowingly makes a false material statement in any record, submission, or report under the NO_x Budget Trading Program shall be subject to criminal enforcement pursuant to the applicable State or Federal law.
(9 VAC 5-140-60 F.2)
3. No permit revision shall excuse any violation of the requirements of the NO_x Budget Trading Program that occurs prior to the date that the revision takes effect.
(9 VAC 5-140-60 F.3)
4. Each NO_x Budget source and each NO_x Budget unit shall meet the requirements of the NO_x Budget Trading Program.
(9 VAC 5-140-60 F.4)

5. Any provision of the NO_x Budget Trading Program that applies to a NO_x Budget source or the NO_x authorized account representative of a NO_x Budget source shall also apply to the owners and operators of such source and of the NO_x Budget units at the source.
(9 VAC 5-140-60 F.5)
6. Any provision of the NO_x Budget Trading Program that applies to a NO_x Budget unit or the NO_x authorized account representative of a NO_x budget unit shall also apply to the owners and operators of such unit. Except with regard to the requirements applicable to units with a common stack under Article 8 (9 VAC 5-140-700 et seq.), the owners and operators and the NO_x authorized account representative of one NO_x Budget unit shall not be liable for any violation by any other NO_x Budget unit of which they are not owners or operators or the NO_x authorized account representative and that is located at a source of which they are not owners or operators or the NO_x authorized account representative.
(9 VAC 5-140-60 F.6)

F. Effect on Other Authorities.

No provision of the NO_x Budget Trading Program, a NO_x Budget permit application, a NO_x Budget permit, or an exemption under 9 VAC 5-140-50 shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NO_x authorized account representative of a NO_x Budget source or NO_x Budget unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.
(9 VAC 5-140-60 G)

XII. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-690 concerning review of proposed permits by EPA and draft permits by affected states.

1. Odor (9 VAC 5 Chapter 40, Article 2)
2. State toxics rule (9 VAC 5 Chapter 60)
3. Conditions 11, 16, and 21.b. and c. of the October 15, 2004, NSR permit for the Syn Fuel Plant as follows:

Condition 11 – Stack Height (State-Only Enforceable) – The dust collector exhaust stack, if applicable, shall be a minimum of 30 feet above ground level with an unobstructed vertical discharge in order to comply with ambient air quality standards for the hazardous air pollutant vinyl acetate (CAS No. 108-05-4). No changes to the stack height, diameter, location, or exit configuration are allowed without obtaining prior written approval from the Tidewater Regional Office.

Condition 16 – Emission Limits (State-Only Enforceable) – Latex binder process hazardous air pollutant (HAP) emissions shall not exceed the limits specified below:

Vinyl Acetate (CAS No. 108-05-4)	2.16 lb/hr	5.4 tons/yr
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Condition 21.b. – (Records of) The hourly and annual consumption of the latex binders Covol 298-1, SB-3200, FTH-300 or equivalent latex binder (undiluted, as delivered). Hourly binder consumption shall be calculated daily by dividing the total volume (in gallons) of binder consumed during the 24-hour period ending at midnight of each calendar day by the actual operating hours of the synfuel plant during the same 24-hour period. Annual binder consumption for each binder shall be calculated monthly as the sum of each consecutive 12-month period.

Condition 21.c. – (Records of) MSDS sheets for the latex binders Covol 298-1, SB-3200, FTH-300, or equivalent latex binder.

(9 VAC 5-80-110 N and 9 VAC 5-80-300)